



FOREST VALUE ORIENTATIONS OF INTEREST GROUPS IN THREE REGIONS VARYING IN IMPORTANCE OF COMMERCIAL FORESTRY

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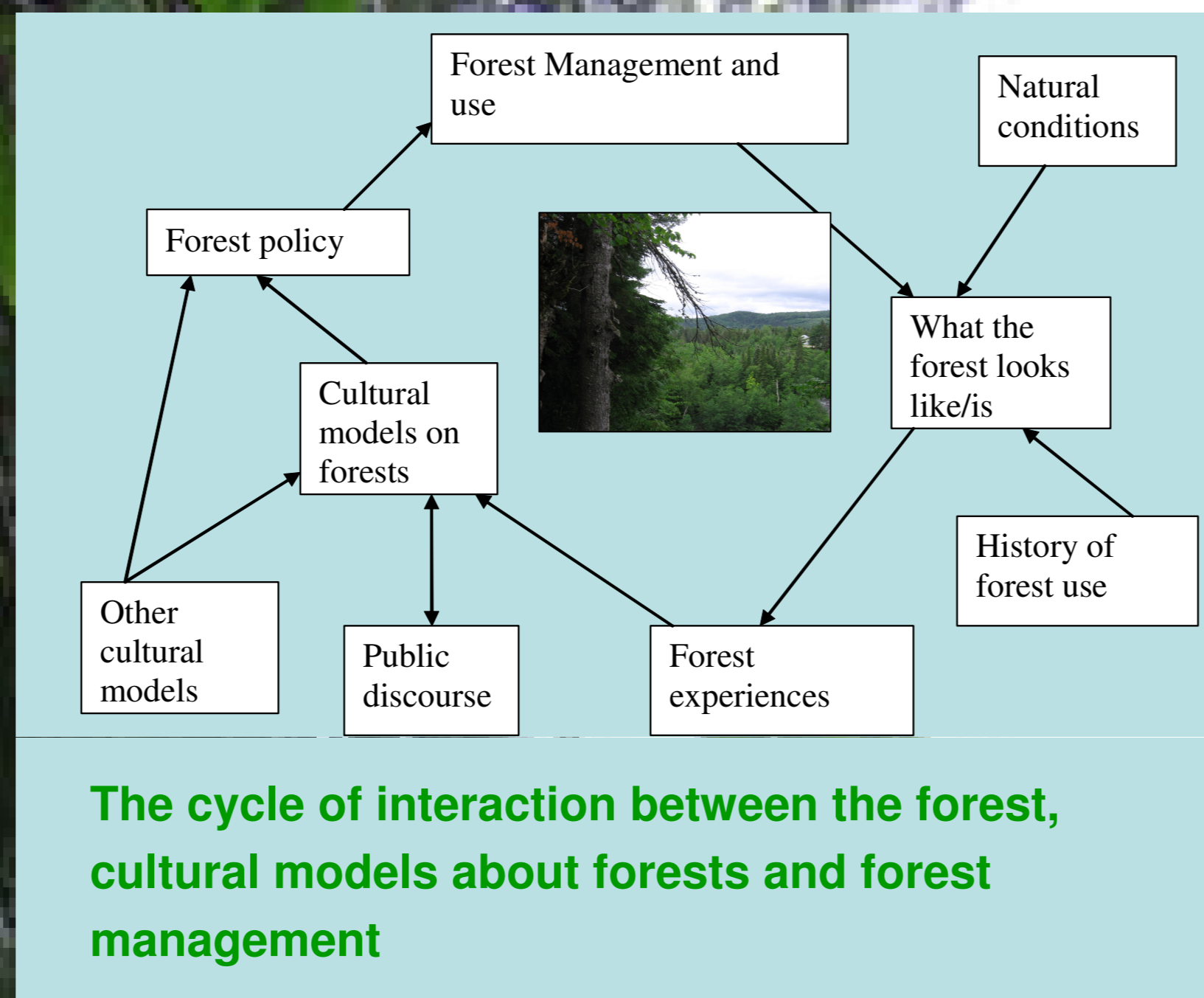
Introduction

Previous studies state that forest management should reflect peoples' values. We believe that this relationship between values and forest use functions is a two way interaction, as is our more direct physical interaction with the environment.

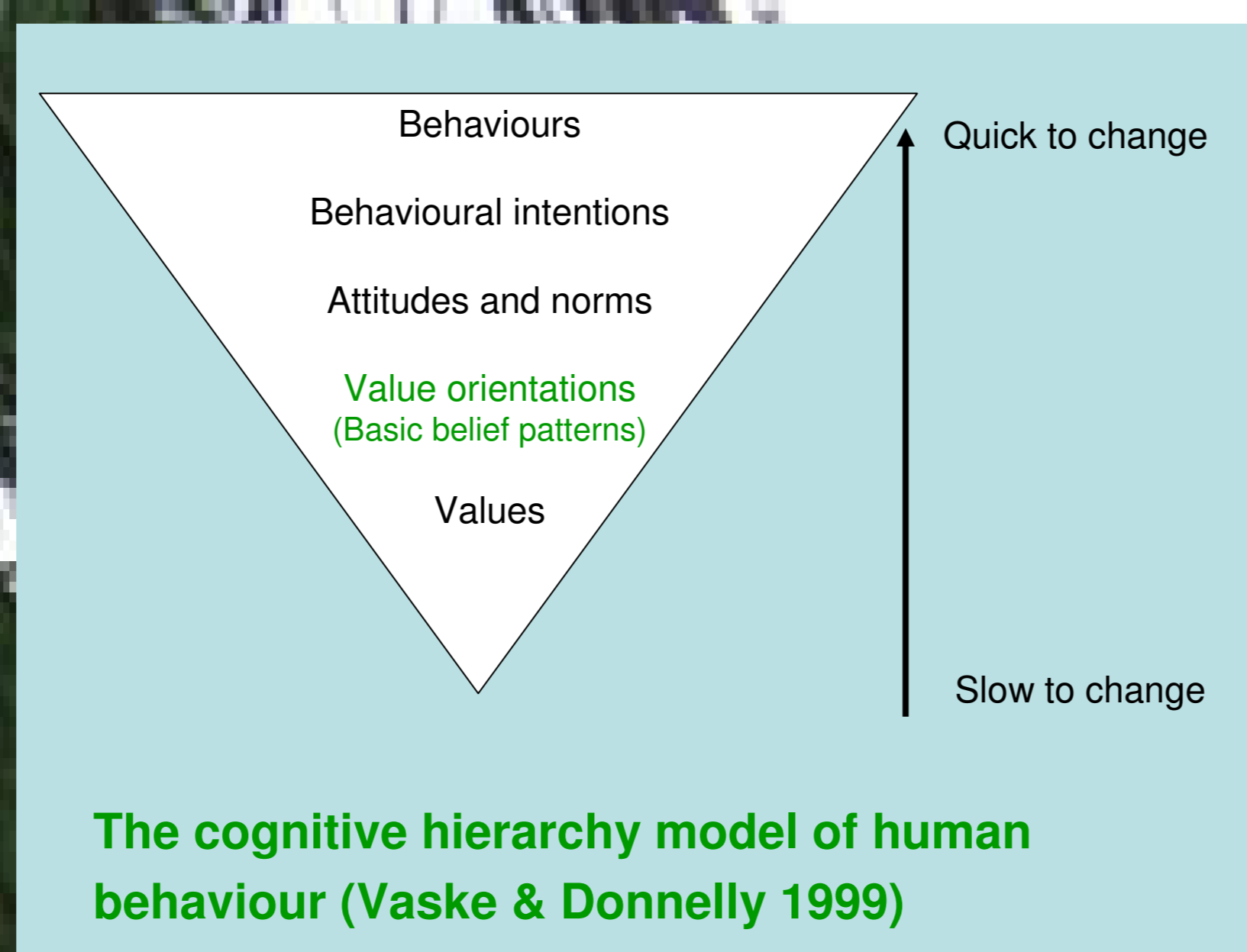
Forest experience creates cultural models about forests that may vary between individuals and groups (Shore 1996). Persistent cultural models are transmitted from one generation to the next. We present a conceptual model to illustrate the cycle of interaction between the forest, cultural models about forests and forest management.

The measurement of value orientations is based on the cognitive hierarchy model of human behaviour. Value orientations are patterns of basic beliefs that strengthen and give meaning to fundamental values. They can be used to predict attitudes or behaviour.

Evidence exists that forest value orientations are distributed along a single continuum from anthropocentric to biocentric.



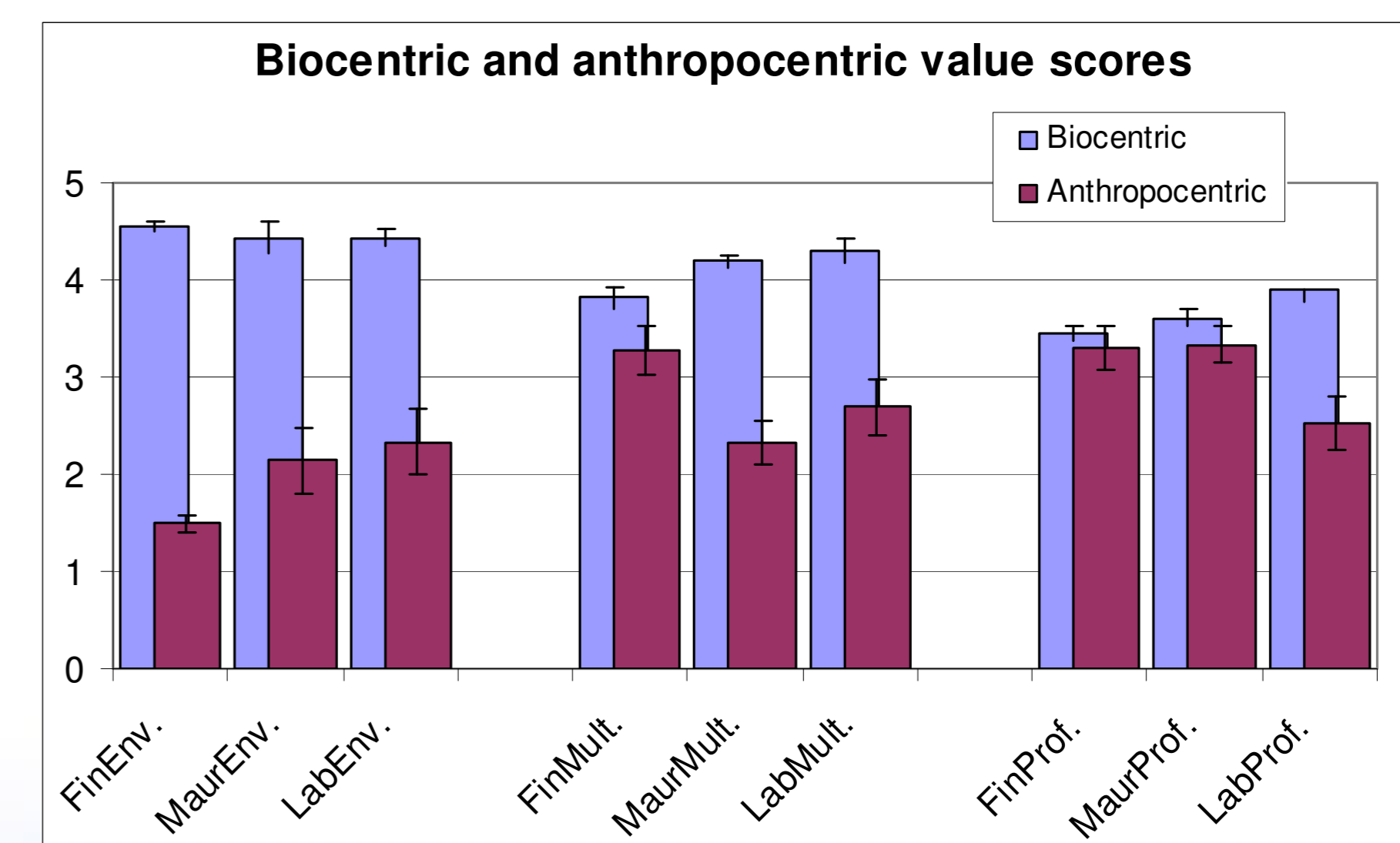
The cycle of interaction between the forest, cultural models about forests and forest management



The cognitive hierarchy model of human behaviour (Vaske & Donnelly 1999)

Results

The anthropocentric score of the multiple users in Finland and the biocentric score of the professionals in Labrador were higher than among the same groups in other regions, however there is no clear Trend along the gradient of regions with higher to lower importance of commercial forestry. Differences between extreme groups show a descending trend from Finland to Labrador, but standard errors are high.



Fin = Southeastern Finland
 Maur = Mauricie
 Lab = Central Labrador
 Env. = Environmentalists
 Mult. = Multiple Users
 Prof. = Forestry Professionals

Differences in biocentric and anthropocentric value scores between extreme groups

	Biocentric	Std. error	Anthropocentric	Std. error
Southeastern Finland	1,10	0,10	1,81	0,23
Mauricie	0,82	0,16	1,19	0,33
Central Labrador	0,52	0,13	0,36	0,34

Study areas and interest groups

Our study areas were Southeastern Finland, the Mauricie in Quebec and Central Labrador. They form a gradient of importance of commercial forestry starting in Southeastern Finland as the most intensive. They all have an extensive cover of boreal forest and forest use is important for the local people.

The study included the following groups in each area:

- 1) local or regional environmental groups;
- 2) multiple users of the forest;
- 3) forestry professionals

In Southeastern Finland forest owners and in Central Labrador the Metis and the Innu were also included.

Hypothesis

1. As the importance of commercial forestry increases, the more anthropocentric forest value orientation is expressed whereas the opposite trend is expected for the biocentric value orientation.
2. Inter-group differences increase as the importance of commercial forestry increases.
3. A respondent's forest value orientation can be positioned along a single biocentric/anthropocentric continuum.

Methods

We used self-administered questionnaires in seminars organized separately for each interest group. Questions measured forest value orientations (McFarlane and Boxall 2000). The participants were classified according to their value orientations using a cluster analysis. A biocentric score and anthropocentric score were calculated for each cluster.

Discussion

No clear trends regarding anthropocentric or biocentric value orientations were detected across regions. The results do not support hypothesis 1. Differences between extreme groups grew when the importance of commercial forestry increased. This finding gives support for hypothesis 2.

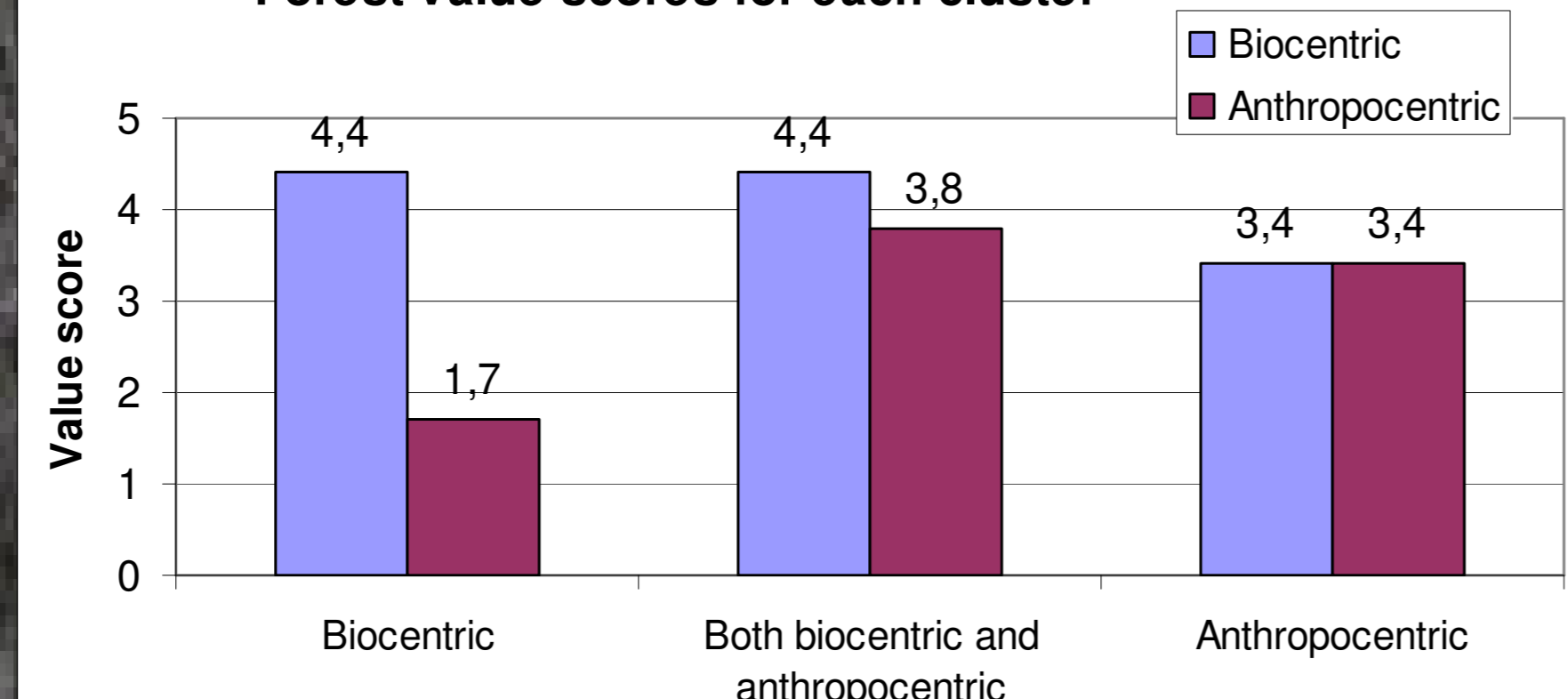
We did not find a single biocentric-anthropocentric continuum and there was thus no support for hypothesis 3. In contrast, 25 % of the respondents held both biocentric and anthropocentric value orientations simultaneously. This is similar to results for wildlife value orientations in Western US, where 20 % of respondents held both mutualist and utilitarian value orientations (Teel *et al.* 2005). Teel *et al.* (2005) call them pluralists and present a classification that can be adapted to forest value orientations.

Our results give an indication that those who have a close connection to the forest and use non-wood forest products may see humans and nature as inseparable. This reflects an aboriginal or traditional world view.

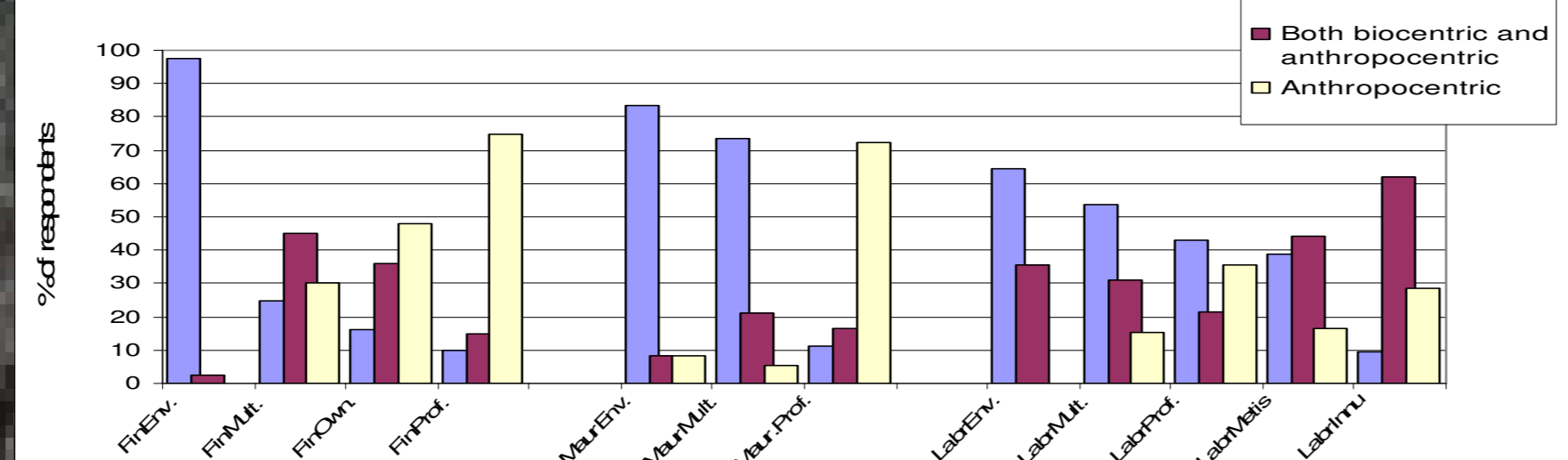
Participants per interest group

	Environmentalists	Forestry Professionals	Multiple users	Forest owners	Aboriginals	Total
Southeastern Finland	41	24	22	28	-	115
Mauricie	13	18	20	-	-	51
Central Labrador	15	15	15	-	41	86

Forest value scores for each cluster



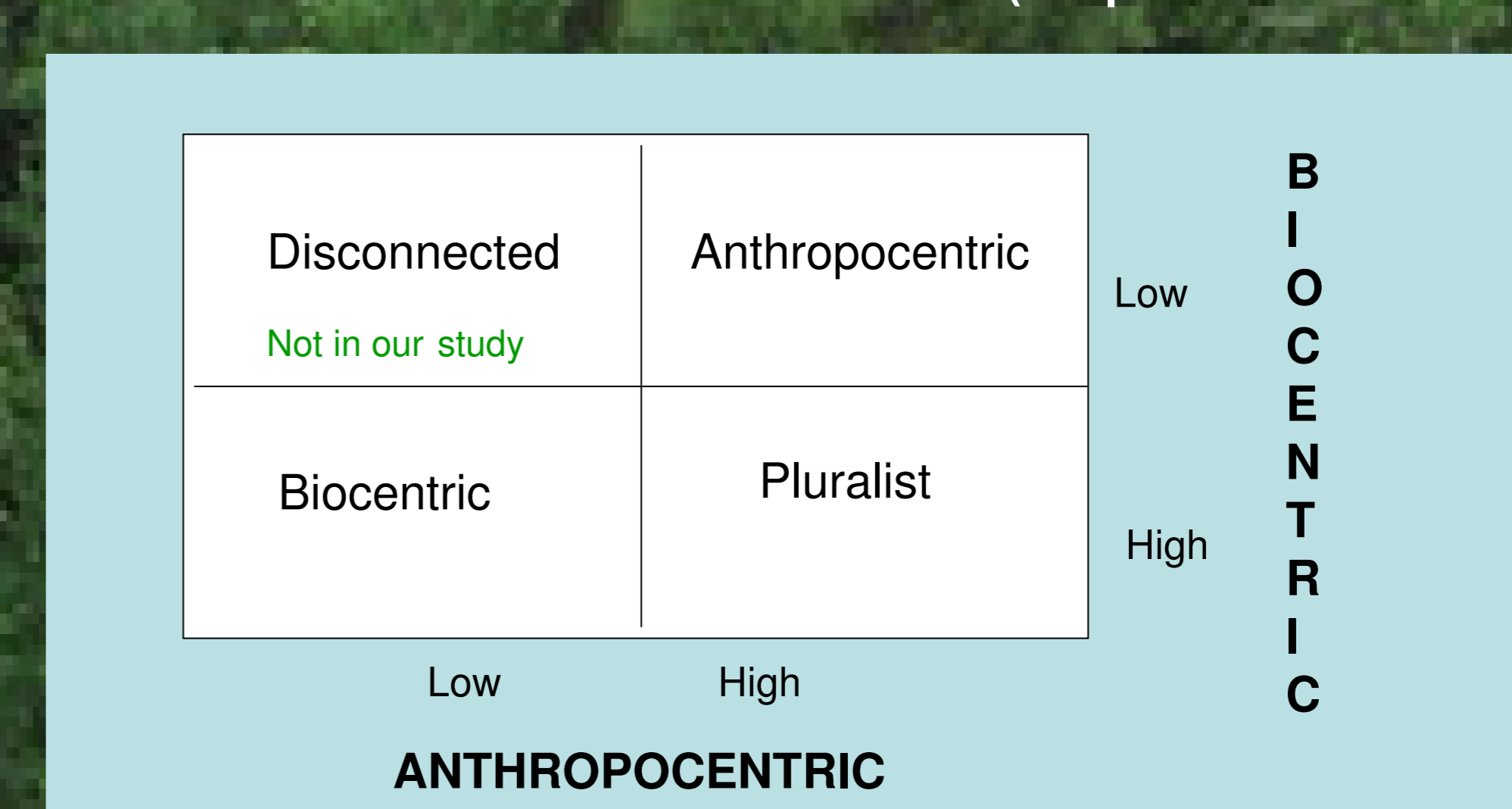
Distribution of clusters among interest groups



Results

A total of 252 persons participated. We identified three clusters: biocentric, anthropocentric and a cluster with high scores both in biocentric and anthropocentric scales. The largest proportion of the biocentric cluster was found among the environmentalists whereas the anthropocentric score occurred among the professionals. The largest proportion of the mixed cluster was found among the Innu, Metis and The multiple users of Finland.

Classification of forest value orientations (adapted from Teel *et al.* 2005).



References

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